



**BLUE ROCK  
ENVIRONMENTAL, INC.**

Mr. Bob Stone  
Environmental Health Specialist  
Humboldt County Division of Environmental Health  
100 H Street, Suite 100  
Eureka, CA, 95501

January 19, 2005

Re: **First Quarter 2005 Groundwater Monitoring Report**  
Indianola Market  
7769 Myrtle Avenue  
Eureka, CA  
**Project No. NC-18**  
**LOP # 12690**

**FILE COPY**

Dear Mr. Stone,

This report presents the results of the First Quarter 2005 groundwater monitoring activities at 7769 Myrtle, Eureka, Humboldt County, California (site) (Figure 1), and was prepared for Mr. And Mrs. Cecil Alto by Blue Rock Environmental, Inc. (Blue Rock).

## **Background**

### Site Description

The subject site is located near the northern boundary of the City of Eureka in Humboldt County approximately 800 feet north of the intersection of Indianola Cutoff and Myrtle Avenue in a combined commercial/ residential area of Eureka at approximately 25 feet above mean sea level (Figure 1). The site is located in the southern portion of a 5-acre parcel of land containing two residences, the Indianola Market, and The Alto Brothers Trucking equipment maintenance/ storage yard and office.

### Site History

The Indianola Market contained two 550-gallon capacity gasoline underground storage tanks (UST) and one 550-gallon capacity diesel UST (Figure 2). The UST system, consisting of one 550-gallon gasoline and one 550-gallon diesel UST was constructed in 1953. At some time during the 1960's, the diesel UST was abandoned in-place and an additional 550-gallon gasoline UST was installed. The UST system was operated until September 1998, when the three USTs were closed by removal. The UST system was replaced by a single 1000-gallon capacity aboveground gasoline storage tank, which is currently located on a concrete pad directly above the former UST excavation.

In September 1998, Christens NCI, Inc. (NCI), of Eureka, California, decommissioned and removed three USTs from the site along with associated piping, dispensers, and the dispenser



island. This work was observed by the HCDEH and at the direction of the HCDEH inspector, approximately 50 to 75 cubic yards of obviously impacted soil was excavated and stockpiled at the site pending disposal. During UST removal activities, petroleum hydrocarbon stained soils were observed and groundwater entering the excavation exhibited a sheen accompanied by hydrocarbon odors. This confirmed that an unauthorized release of petroleum had occurred. On September 29, 1998, an unauthorized release report was filed by Mr. Jerry Avila, operator of the UST system at that time. After completion of UST removal and soil excavation operations, NCI personnel collected confirmation soil and groundwater samples from the excavation at locations specified by the HCDEH. Results of soil and groundwater sampling confirmed that an unauthorized release of petroleum had occurred.

#### Site Investigation and Corrective Action History

On October 1, 2001, Clearwater Group (Clearwater) supervised Fisch Environmental of Valley Springs, California drill five direct push borings to preliminarily investigate the onsite extent of soil and groundwater contamination resulting from the confirmed release from the former UST system. Results for this investigation and the locations of the proposed monitoring wells were presented in Clearwater's *Preliminary Subsurface Investigation Report* dated October 22, 2001. In a letter dated October 26, 2001, the HCDEH concurred with Clearwater recommendations for monitoring well locations.

On November 7, 2001, Clearwater supervised Mitchell Drilling Environmental (MDE) in installing three monitoring wells: MW-1, MW-2 and MW-3 (Figure 2). These monitoring wells were placed in locations to assess the sorbed and dissolved-phase hydrocarbon contamination associated with the UST release. Results of this investigation are presented in Clearwater's *Monitoring Well Installation and Fourth Quarter 2001 Groundwater Monitoring Report* dated December 13, 2001.

On October 10, 2002, Clearwater supervised MDE in drilling two monitoring wells: MW-4 and MW-5 (Figure 2). These monitoring wells were placed in locations to further assess the residual sorbed and dissolved-phase gasoline and diesel range hydrocarbon contamination associated with the UST release. Data collected during this phase of investigation are presented in Clearwater's *Monitoring Well Installation and Fourth Quarter 2002 Groundwater Monitoring Report / Sensitive Receptor Survey* dated November 18, 2002.

On June 10, 2003, Clearwater supervised MDE in installing four soil borings: B-6 to B-9 (Figure 2). These borings were placed in locations to further assess the residual sorbed and dissolved-phase gasoline and diesel range hydrocarbon contamination associated with the UST release. Data collected during this phase of investigation are presented in Clearwater's *Additional Investigation Report* dated July 8, 2003.

Per HCDEH request in a letter dated July 11, 2003, Clearwater prepared and submitted a *Corrective Action Plan* (CAP) dated February 18, 2004. The HCDEH responded to the CAP



submitted by Clearwater in a letter dated April 23, 2004 requesting corrections to the existing CAP and a response to questions contained in that letter. In May 2004, Blue Rock was retained by Mr. And Mrs. Alto to continue site work. Blue Rock subsequently submitted a brief letter report dated June 15, 2004 in response to HCDEH requests.

## **Field and Laboratory Activities**

### Groundwater Monitoring Activities

On January 4, 2005, five wells (MW-1 through MW-5) were gauged and sampled. Prior to sampling, an electronic water level indicator was used to gauge depth to water in each well, accurate to within  $\pm 0.01$ -foot. All wells were checked for the presence of light non-aqueous phase liquid (LNAPL) petroleum prior to purging. No measurable thicknesses of LNAPL were observed on groundwater in any of the wells. Additionally, groundwater from the domestic well located at 7711 Myrtle Ave. (downgradient of MW-5) was sampled and analyzed.

In preparation for sampling, the wells were purged of groundwater until sampling parameters (temperature, pH, and conductivity) stabilized. Following recovery of water levels to at least 80% of their static levels in the other wells, groundwater samples were collected from the wells using disposable polyethylene bailers and transferred to laboratory supplied containers. Sample containers were labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory.

Purging instruments were cleaned between use by an Alconox<sup>®</sup> wash followed by double rinse in clean tap water to prevent cross-contamination. Purge and rinse water was stored on-site in labeled 55-gallon drums pending future removal and disposal.

Groundwater monitoring and well purging information is presented on Gauge Data/Purge Calculations and Purge Data sheets (attached).

### Groundwater Sample Analyses

Groundwater samples were analyzed by Kiff Analytical (Kiff), a DHS-certified laboratory, located in Davis, California, for the following analytes:

- TPHd by EPA Method 8015 with silica gel cleanup (MW-2 & MW-5)
- TPHg, BTEX and MTBE by EPA Method 8260B



## Groundwater Monitoring Results

### Groundwater Flow Direction and Gradient

Static groundwater in the wells was present beneath the site at depths ranging from approximately 2.05 (MW-1) to 0.78 (MW-5) feet bgs. Gauging data, combined with well elevation data, were used to calculate groundwater elevation, and to generate a groundwater elevation and gradient map. The groundwater flow direction was primarily calculated to be toward the southwest at a gradient of approximately 0.017 ft/ft (Figure 3). The groundwater gradient and flow direction is consistent with previous measurements.

### Groundwater Contaminant Analytical Results

LNAPL:	None
TPHg concentration:	<50 micrograms per liter ( $\mu\text{g/L}$ ) (MW-1, 3, 4 & 5) to 580 $\mu\text{g/L}$ (MW-2)
TPHd concentration:	<50 $\mu\text{g/L}$ (MW-5) to < 80 $\mu\text{g/L}$ (MW-2) (silica gel cleanup)
MTBE concentration:	0.68 $\mu\text{g/L}$ (MW-4) to 580 $\mu\text{g/L}$ (MW-2)
Benzene concentration:	<0.5 $\mu\text{g/L}$ (MW-1, 3, 4, & 5) to <1.5 $\mu\text{g/L}$ (MW-2)

Groundwater sample analytical results are shown graphically on Figures 4 and 5. Cumulative groundwater sample analytical results are summarized in Table 1. Copies of the laboratory report and chain-of-custody form are attached. The domestic well was free of target analytes

### Remarks

Groundwater sample analytical results fall within historical concentration range for the site. Silica gel cleanup was used for the TPHd analysis for groundwater samples collected from MW-2 and MW-5. The plume of dissolved-phase hydrocarbons appears stable with no significant migration.

## Project Status and Recommendations

- The site is currently being monitored on a quarterly basis per the HCDEH directives. The next quarterly sampling event is scheduled for March 2005. Per the HCDEH letter dated July 26, 2004 the current analytical suite is as follows: TPHg, BTEX and MTBE by EPA Method 8260B (all wells) and TPHd by EPA Method 8015 (MW-2 & MW-5).
- The excavation activities outlined in the *Corrective Action Plan* dated February 18, 2004 prepared by Clearwater Group and the *Response to the HCDEH letter dated April 23, 2004 and Documentation of the June 7, 2004 Meeting with the HCDEH* dated June 15, 2004 have been postponed due to the location of a PG&E gas line which runs directly through the center of the proposed excavation. Blue Rock has filed a claim with PG&E so that the gas line in question can be moved out of the excavation area prior to excavation activities occurring.



PG&E representatives have stated that this gas line relocation will likely occur in spring 2005. Blue Rock will continue to update the HCDEH regarding when the excavation will occur.



## Certification

This report was prepared under the supervision of a California Registered Geologist at Blue Rock. All statements, conclusions, and recommendations are based upon published results from past consultants, field observations by Blue Rock, and analyses performed by a state-certified laboratory as they relate to the time, location, and depth of points sampled by Blue Rock or others. Interpretation of data, including spatial distribution and temporal trends, are based on commonly used geologic and scientific principles. It is possible that interpretations, conclusions, and recommendations presented in this report may change, as additional data become available and/or regulations change.

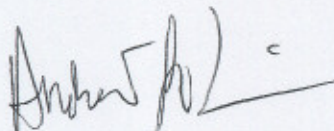
Information and interpretation presented herein are for the sole use of the client and regulating agency. The information and interpretation contained in this document should not be relied upon by a third party.

The service performed by Blue Rock has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

If you have any questions regarding this project, please contact us at (707) 441-1934.

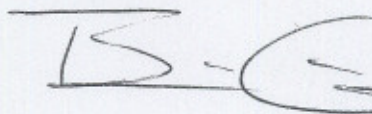
Sincerely,  
Blue Rock Environmental, Inc.

Prepared by:

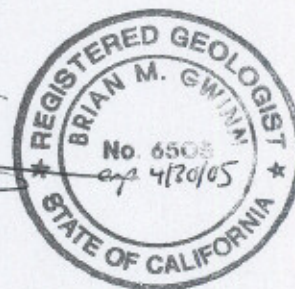


Andrew LoCicero  
Project Scientist

Reviewed by:



Brian Gwinn, RG  
Principal Geologist





**Attachments**

Table 1: Groundwater Elevations and Analytical Results

Table 2: Well Construction Details

Figure 1: Site Location Map

Figure 2: Site Plan

Figure 3: Groundwater Elevation and Gradient 1/4/05

Figure 4: Dissolved-Phase TPHg Distribution 1/4/05

Figure 5: Dissolved-phase MTBE Distribution 1/4/05

Blue Rock Gauge/Purge Calculations and Well Purging Data field sheets

Laboratory Analytical Report and Chain-of-Custody Form

CC: Beverly and Cecil Alto  
7803 Myrtle Avenue  
Eureka, CA 95503

Jerry Avila  
7769 Myrtle Avenue  
Eureka, CA 95503



**Table 1**  
**GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS**  
Indianola Market  
7769 Myrtle Avenue  
Eureka, California  
Project No. NC-018

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHg (µg/L)	TPHd (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	ETBE (µg/L)	TBA (µg/L)	Ethanol (µg/L)	Methanol (µg/L)
MW-1	11/20/01	99.99	5.15	94.84	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	2/2/02	99.99	2.58	97.41	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	5/2/02	99.99	2.67	97.32	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<50
	8/2/02	99.99	5.07	94.92	<50	<50	<0.5	<0.5	<0.5	<0.5	0.99	<0.5	<0.5	<0.5	<5	--	--
	(10/15/2002)	32.22	6.77	25.45	<50	<50	<0.5	<0.5	<0.5	<0.5	0.57	<0.5	<0.5	<0.5	<5	--	--
	1/13/03	32.22	2.03	30.19	<50	<50	<0.5	<0.5	<0.5	<0.5	0.51	<0.5	<0.5	<0.5	<5	--	--
	4/1/03	32.22	1.33	30.89	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	7/10/03	32.22	4.33	27.89	<50	66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	10/2/03	32.22	7.07	25.15	<50	110	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	1/5/04	32.22	3.38	28.84	<50	58	<0.5	<0.5	<0.5	<0.5	2.9	<0.5	<0.5	<0.5	<5	--	--
	4/6/04	32.22	2.85	29.37	<50	81	<0.5	<0.5	<0.5	<0.5	3.2	<0.5	<0.5	<0.5	<5	--	--
	7/1/04	32.22	4.92	27.30	<50	<50	<0.5	<0.5	<0.5	<0.5	3.6	<0.5	<0.5	<0.5	<5	--	--
	10/1/04	32.22	7.04	25.18	<50	--	<0.5	<0.5	<0.5	<0.5	1.5	--	--	--	--	--	--
	1/4/05	32.22	2.05	30.17	<50	--	<0.5	<0.5	<0.5	<0.5	1.6	--	--	--	--	--	--
MW-2	11/20/01	99.15	4.92	94.23	300	<200	<2	<2	<2	<2	1,100	<2	5.3	4	35	<20	<200
	2/2/02	99.15	2.31	96.84	1,400	<500	<5	<5	<5	<5	1,900	<5	5.5	5.4	63	<50	<500
	5/2/02	99.15	2.47	96.68	1,000	<350	3.1	<2.5	<2.5	<2.5	1,200	<2.5	5.8	5.5	33	--	--
	8/2/02	99.15	4.77	94.38	650	<400	<5	<5	<5	<5	2,300	<5	12	6.1	71	--	--
	(10/15/2002)	31.33	6.49	24.84	73	<100	<0.5	<0.5	<0.5	<0.5	310	<0.5	1.9	0.84	7.7	--	--
	1/13/03	31.33	1.97	29.36	1,500	<800	2.6	<0.2	<0.2	3.2	1,300	<0.2	7.3	4.6	41	--	--
	4/1/03	31.33	2.07	29.26	1,000	<1,100	<2	<2	<2	2.8	940	<2	5.4	3.4	25.1	--	--
	7/10/03	31.33	4.09	27.24	1,100	<600	<2	<2	<2	<2	1,000	<2	5.8	4	25.1	--	--
	10/2/03	31.33	6.80	24.53	1,000	<800	<2.5	<2.5	<2.5	<2.5	1,100	<2.5	7.7	5	32.1	--	--
	1/5/04	31.33	2.76	28.57	1,300	<1,000	<1.5	<1.5	<1.5	<1.5	740	<1.5	<1.5	4	22	--	--
	4/6/04	31.33	2.58	28.75	280	120	<0.5	<0.5	<0.5	<0.5	120	<0.5	0.72	0.82	<5	--	--
	7/1/04	31.33	4.56	26.77	510	690	<1.5	<1.5	<1.5	<1.5	800	<1.5	7.10	2.4	27	--	--
	10/1/04	31.33	6.71	24.62	<50	<50 <sup>2</sup>	<0.5	<0.5	<0.5	<0.5	130	--	--	--	--	--	--
	1/4/05	31.33	1.85	29.48	580	<80 <sup>2</sup>	<1.5	<1.5	<1.5	<1.5	580	--	--	--	--	--	--
MW-3	11/20/01	99.30	3.36	95.94	<50	<50	<0.5	<0.5	<0.5	<0.5	100	<0.5	0.85	<0.5	8.1	<5	<50
	2/2/02	99.30	1.56	97.74	<50	<50	<0.5	<0.5	<0.5	<0.5	2.4	<0.5	<0.5	<0.5	<5	<5	<50
	5/2/02	99.30	1.67	97.63	<50	<50	<0.5	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	<5	--	--
	8/2/02	99.30	3.37	95.93	<50	<50	<0.5	<0.5	<0.5	<0.5	89	<0.5	0.65	<0.5	5.3	--	--
	(10/15/2002)	31.47	5.06	26.41	<50	<50	<0.5	<0.5	<0.5	<0.5	94	<0.5	0.79	<0.5	<5	--	--
	1/13/03	31.47	1.44	30.03	<50	56	<0.5	<0.5	<0.5	<0.5	340	<0.5	2.1	<0.5	27	--	--
	4/1/03	31.47	1.37	30.10	51	<50	<0.5	<0.5	<0.5	<0.5	280	<0.5	2	<0.5	18	--	--
	7/10/03	31.47	2.80	28.67	<50	89	<0.5	<0.5	<0.5	<0.5	89	<0.5	0.84	<0.5	6.4	--	--



**Table 1**  
**GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS**  
Indianola Market  
7769 Myrtle Avenue  
Eureka, California  
Project No. NC-018

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHg (µg/L)	TPHd (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	ETBE (µg/L)	TBA (µg/L)	Ethanol (µg/L)	Methanol (µg/L)
MW-3	10/2/03	31.47	5.41	26.06	<50	<b>150</b>	<0.5	<0.5	<0.5	<0.5	<b>110</b>	<0.5	<b>0.71</b>	<0.5	<5	--	--
	1/5/04	31.47	2.46	29.01	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>11</b>	<0.5	<0.5	<0.5	<5	--	--
	4/6/04	31.47	1.71	29.76	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>0.73</b>	<0.5	<0.5	<0.5	<5	--	--
	7/1/04	31.47	3.16	28.31	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>80</b>	<0.5	<0.5	<0.5	<5	--	--
	10/1/04	31.47	5.26	26.21	<50	--	<0.5	<0.5	<0.5	<0.5	<b>61</b>	--	--	--	--	--	--
	1/4/05	31.47	1.43	30.04	<50	--	<0.5	<0.5	<0.5	<0.5	<b>9</b>	--	--	--	--	--	--
MW-4	10/15/02	32.74	4.99	27.75	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>4.1</b>	<0.5	<0.5	<0.5	<5	--	--
	1/13/03	32.74	1.41	31.33	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>0.92</b>	<0.5	<0.5	<0.5	<5	--	--
	4/1/03	32.74	1.45	31.29	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>0.70</b>	<0.5	<0.5	<0.5	<5	--	--
	7/10/03	32.74	2.82	29.92	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>7.9</b>	<0.5	<0.5	<0.5	<5	--	--
	10/2/03	32.74	5.32	27.42	<50	<b>99</b>	<0.5	<0.5	<0.5	<0.5	<b>6.9</b>	<0.5	<0.5	<0.5	<5	--	--
	1/5/04	32.74	2.60	30.14	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	4/6/04	32.74	1.88	30.86	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	7/1/04	32.74	3.19	29.55	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>17</b>	<0.5	<0.5	<0.5	<5	--	--
	10/1/04	32.74	5.16	27.58	<50	--	<0.5	<0.5	<0.5	<0.5	<b>6.3</b>	--	--	--	--	--	--
	1/4/05	32.74	1.52	31.22	<50	--	<0.5	<0.5	<0.5	<0.5	<b>0.68</b>	--	--	--	--	--	--
MW-5	10/15/02	29.71	7.11	22.60	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>32</b>	<0.5	<0.5	<0.5	<5	--	--
	1/13/03	29.71	0.66	29.05	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>31</b>	<0.5	<0.5	<0.5	<5	--	--
	4/1/03	29.71	1.75	27.96	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>35</b>	<0.5	<0.5	<0.5	<5	--	--
	7/10/03	29.71	4.60	25.11	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>20</b>	<0.5	<0.5	<0.5	<5	--	--
	10/2/03	29.71	7.45	22.26	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>9</b>	<0.5	<0.5	<0.5	<5	--	--
	1/5/04	29.71	2.31	27.40	<50	<b>85</b>	<0.5	<0.5	<0.5	<0.5	<b>29</b>	<0.5	<0.5	<0.5	<5	--	--
	4/6/04	29.71	2.53	27.18	<50	<b>68</b>	<0.5	<0.5	<0.5	<0.5	<b>38</b>	<0.5	<0.5	<0.5	<5	--	--
	7/1/04	29.71	4.95	24.76	<b>86</b>	<b>86</b>	<0.5	<0.5	<0.5	<0.5	<b>170</b>	<0.5	<b>1.4</b>	<b>0.97</b>	<b>17</b>	--	--
	10/1/04	29.71	7.26	22.45	<50	<50 <sup>2</sup>	<0.5	<0.5	<0.5	<0.5	<b>2</b>	--	--	--	--	--	--
	1/4/05	29.71	0.78	28.93	<50	<50 <sup>2</sup>	<0.5	<0.5	<0.5	<0.5	<b>5.3</b>	--	--	--	--	--	--



**Table 1**  
**GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS**  
Indianola Market  
7769 Myrtle Avenue  
Eureka, California  
Project No. NC-018

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHg (µg/L)	TPHd (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	ETBE (µg/L)	TBA (µg/L)	Ethanol (µg/L)	Methanol (µg/L)
Dom - 1	4/1/03	(Domestic well located at 7711 Myrtle Ave.)			<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	--	--
	1/4/05				<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
MCL					--	--	1	150	700	1,750	5						
Taste & odor threshold					5	100	--	42	29	17	5						
NCRWQCB cleanup goals					<50	56	0.50	42	29	17	5						

**Notes :**

TOC: Top of casing referenced to mean sea level (4.33 NAVD 88 (NGS LV 0638) SS rod E1401 1988

Sample date in parentheses indicates new wellhead survey per Geotracker

DTW: Depth to water as referenced to benchmark.

GWE: Ground water elevation as referenced to benchmark

µg/L=micrograms per liter

"--": Not analyzed, available, or applicable

MCL: Maximum contaminant level, an enforceable drinking water standard

Taste & odor threshold: A drinking water standard

1. Tert Butanol results may be biased high (see case narrative in laboratory report)

2. TPHd analysis performed using silica gel cleanup

TPHg: Total Petroleum Hydrocarbons as Gasoline by Method 5030/8260B

TPHd: Total Petroleum Hydrocarbons as Diesel by Method 3510/8015M

MTBE: Methyl Tertiary Butyl Ether by Method 8260B

DIPE: Di-Isopropyl Ether by Method 8260B

TAME: Tertiary Amyl Methyl Ether by method 8260B

ETBE: Ethyl Tertiary Butyl Ether by Method 8260B

TBA: Tertiary Butyl Alcohol by Method 8260B

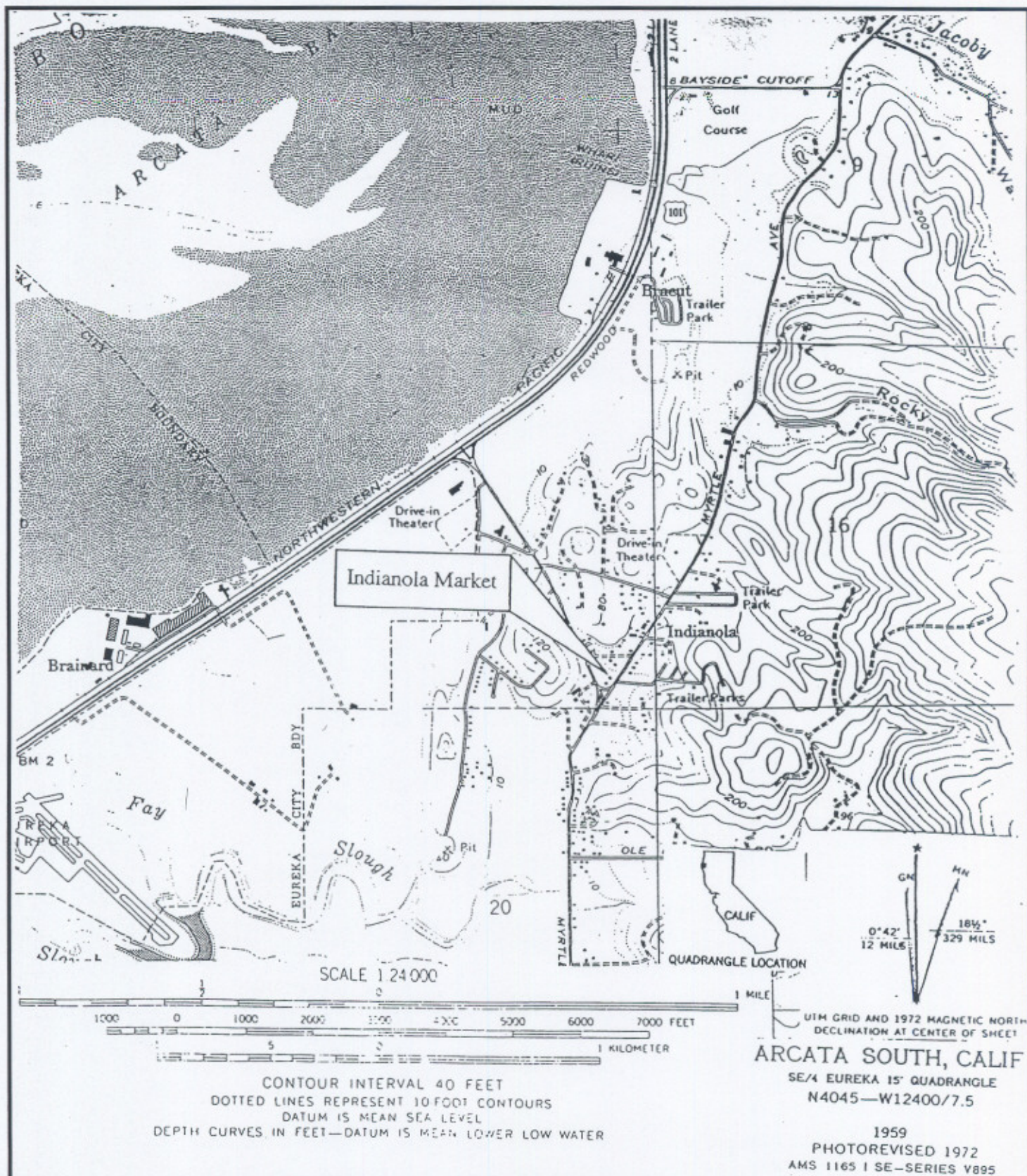
NCWQCB: North Coast Water Quality Control Board



**Table 2**  
**Well Construction Details**  
Indianola Market  
7769 Myrtle Avenue  
Eureka, CA  
Project # NC-18

<b>Well Identification</b>	<b>Date Installed</b>	<b>Installed by</b>	<b>Casing Diameter (inches)</b>	<b>Total Depth (feet)</b>	<b>Blank Interval (feet)</b>	<b>Screened Interval (feet)</b>	<b>Slot Size (inches)</b>	<b>Filter Pack (feet)</b>	<b>Bentonite Seal (feet)</b>	<b>Cement (feet)</b>
MW-1	10/10/01	Clearwater	2	20	0-3	3-20	0.02	2-20	1-2	0-1
MW-2	10/10/01	Clearwater	2	20	0-3	3-20	0.02	2-20	1-2	0-1
MW-3	10/10/01	Clearwater	2	20	0-3	3-20	0.02	2-20	1-2	0-1
MW-4	11/7/02	Clearwater	2	20	0-3	3-20	0.02	2-20	1-2	0-1
MW-5	11/7/02	Clearwater	2	20	0-3	5-20	0.02	2-20	1-2	0-1





**Site Location Map**  
 Indianola Market  
 7769 Myrtle Avenue  
 Eureka, California



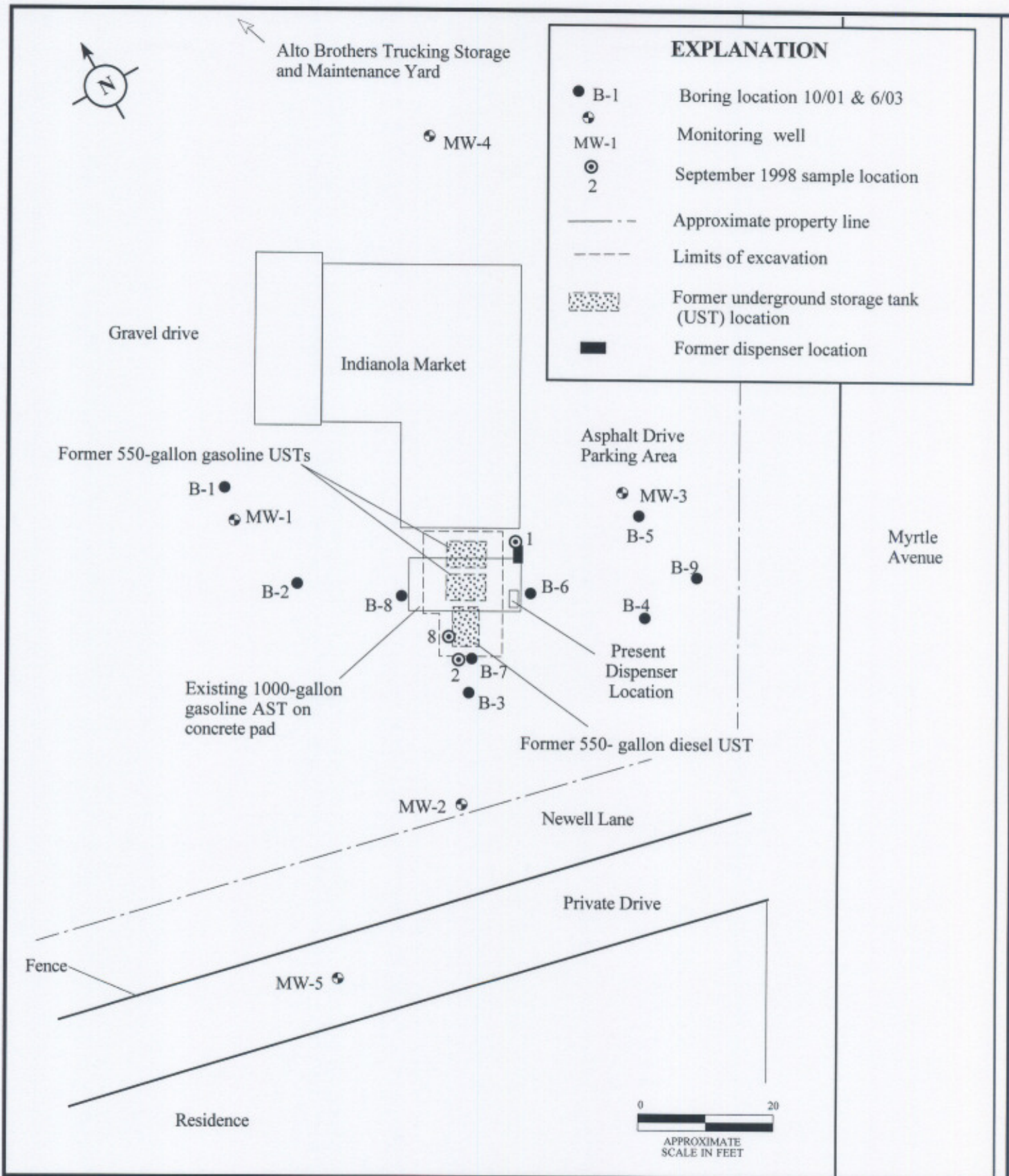
**BLUE ROCK  
 ENVIRONMENTAL, INC.**

Project No.  
**NC-18**

Date  
**1/05**

Figure  
**1**





**Site Plan**  
 Indianola Market  
 7769 Myrtle Avenue  
 Eureka, California



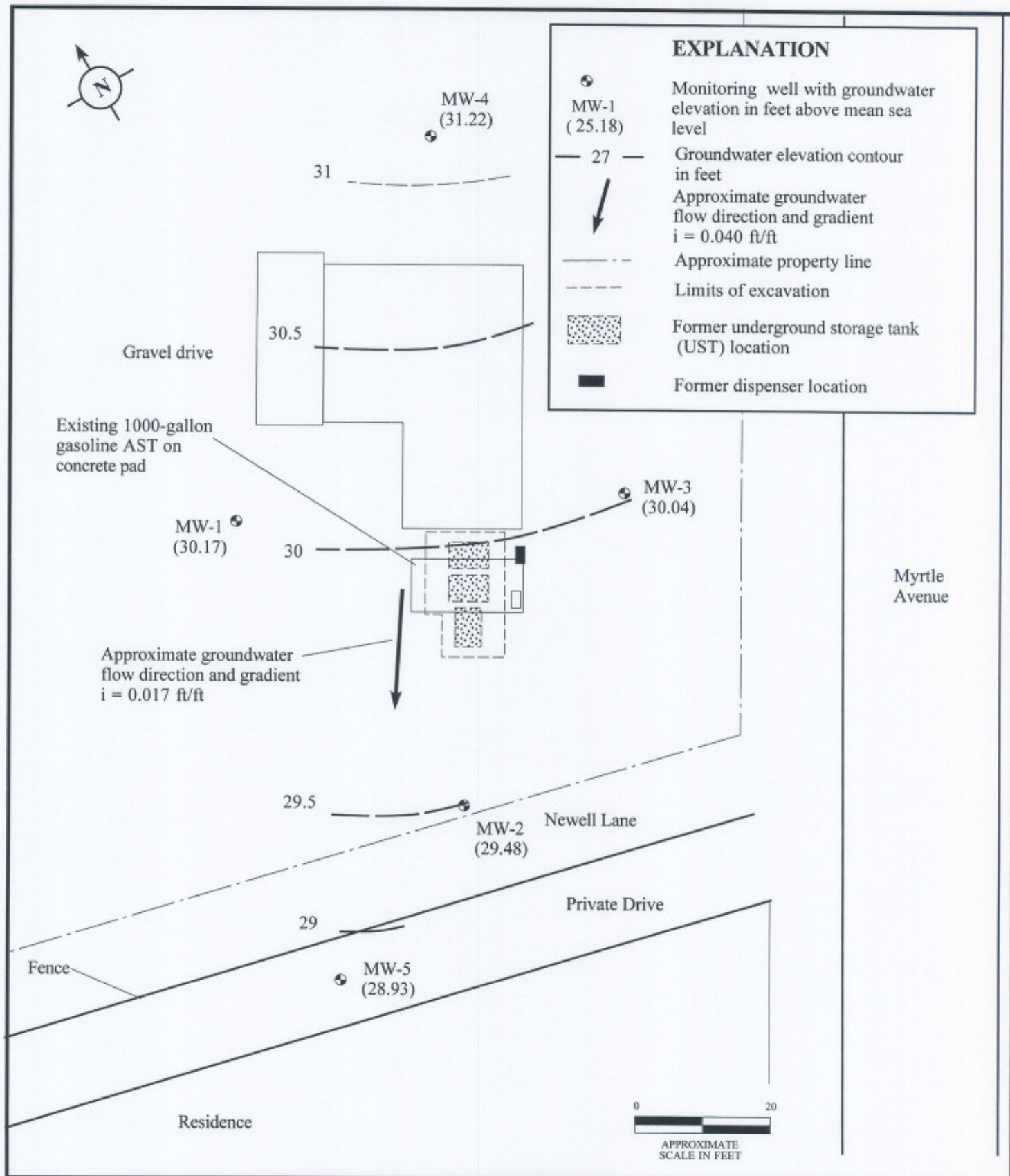
**BLUE ROCK  
 ENVIRONMENTAL, INC.**

Project No.  
**NC-18**

Date  
**1/05**

Figure  
**2**





# Groundwater Elevation and Gradient 1/4/05

Indianola Market  
7769 Myrtle Avenue  
Eureka, California



BLUE ROCK  
ENVIRONMENTAL, INC.

Project No.  
NC-18

Date  
1/05

Figure  
3





Alto Brothers Trucking Storage  
and Maintenance Yard

MW-4  
TPHg <50  
Benzene <0.5  
MTBE = 0.68

MW-4

Gravel Drive

MW-1  
TPHg < 50  
Benzene < 0.5  
MTBE = 1.6

MW-1

Former 550 Gallon Gasoline USTs

Existing 1000-Gallon  
gasoline AST on  
concrete pad

100 µg/L

Asphalt Drive  
Parking Area

MW-3  
TPHg <50  
Benzene <0.5  
MTBE = 9

MW-3

Present  
Dispenser  
Location

Former 550-gallon diesel UST

MW-2  
TPHg = 580  
TPHd <80  
Benzene < 1.5  
MTBE = 580

MW-2

MW-5  
TPHg <50  
TPHd <50  
Benzene <0.5  
MTBE = 5.3

MW-5

Private Drive

Newell Lane

Fence

Residence

## EXPLANATION

MW-1  
TPHg <50  
TPHd <50  
Benzene <0.5  
MTBE = 1.5

Monitoring well with  
dissolved-phase hydrocarbon  
distribution in micrograms  
per liter (µg/L)



Isoconcentration contour  
for total petroleum hydrocarbons  
as gasoline (TPHg)

50 µg/L

Approximate property line

Limits of excavation



Former underground storage tank  
(UST) location



Former dispenser location

Myrtle  
Avenue

0 20

APPROXIMATE  
SCALE IN FEET

### Dissolved-Phase TPHg Distribution 1/4/05

Indianola Market  
7769 Myrtle Avenue  
Eureka, California



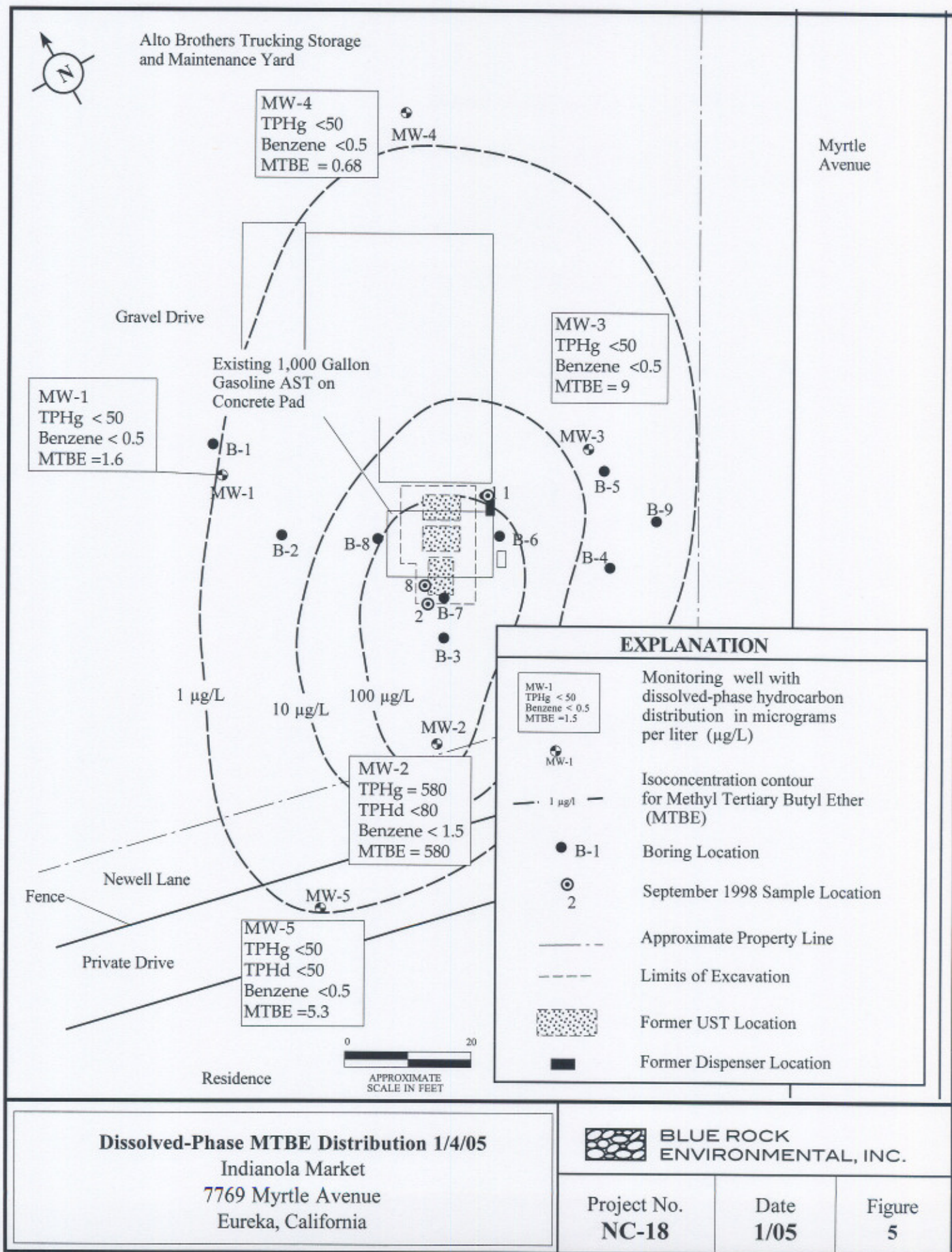
BLUE ROCK  
ENVIRONMENTAL, INC.

Project No.  
**NC-18**

Date  
**1/05**

Figure  
**4**







## GAUGING DATA/PURGE CALCULATIONS

Job No.: NC-18 Location: 7769 Myrtle Ave Date: 1/4/85 Tech(s): M. Richard

Συντεκα

[illegible]

**Explanation:**

DIA. = Well Diameter

DTB = Depth to Bottom

DTW = Depth to Water

ST = Saturated Thickness (DTB-DTW)

CV = Casing Volume (ST x cf)

PV = Purge Volume (standard 3 x CV,  
well development 10 x CV)

SPH = Thickness of Separate Phase Hydrocarbons

**Conversion Factors (cf):**

2 in. dia. well  $cf = 0.16$  gal./ft.

4 in. dia. well cf = 0.65 gal./ft.

6 in. dia. well cf = 1.44 gal./ft.



BLUE ROCK  
ENVIRONMENTAL, INC.



## PURGING DATA

SHEET 1 OF 2

Job No.: N-18Location: 769 Myrtle AveDate: 11/4/05Tech: M. RichardEureka

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
<u>MW-1</u>		<u>0</u>	<u>---</u>	<u>---</u>	<u>---</u>	Sample for: TPHmo 7-oxygenates
Calc. purge volume <u>6.97</u>	<u>11:15</u>	<u>&lt;1.00</u>	<u>0.25</u>	<u>56.3</u>	<u>5.34</u>	TPHg TPHd <u>8260</u>
	<u>11:35</u>	<u>~3.50</u>	<u>0.22</u>	<u>56.6</u>	<u>5.11</u>	<u>BTEX</u> <u>MTBE</u> 5-oxygenates
	<u>11:55</u>	<u>~6.97</u>	<u>0.21</u>	<u>56.7</u>	<u>5.08</u>	Purging Method: PVC bailer / Pump/ <u>Disposable Bailer</u>
COMMENTS: color, turbidity, recharge, sheen, odor <u>clear to light brown</u> <u>low to med turb</u> <u>fast recharge</u> <u>no sheen</u> <u>no odor</u>						Sampling Method: Dedicated / <u>Disposable bailer</u> Sample at: <u>12:00</u>

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
<u>MW-2</u>		<u>0</u>	<u>---</u>	<u>---</u>	<u>---</u>	Sample for: TPHmo 7-oxygenates
Calc. purge volume <u>7.79</u>	<u>12:15</u>	<u>&lt;1.00</u>	<u>0.32</u>	<u>55.5</u>	<u>5.97</u>	TPHg <u>Seal</u> TPHd <u>8260</u>
	<u>12:35</u>	<u>~3.90</u>	<u>0.33</u>	<u>55.6</u>	<u>6.08</u>	<u>BTEX</u> <u>MTBE</u> 5-oxygenates
	<u>12:55</u>	<u>~7.79</u>	<u>0.33</u>	<u>56.8</u>	<u>6.07</u>	Purging Method: PVC bailer/Pump/ <u>Disposable Bailer</u>
COMMENTS: color, turbidity, recharge, sheen, odor <u>clear to light brown</u> <u>fast recharge</u> <u>no sheen</u> <u>trace odor</u>						Sampling Method: Dedicated / <u>Disposable bailer</u> Sample at: <u>13:00</u>

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
<u>MW-3</u>		<u>0</u>	<u>---</u>	<u>---</u>	<u>---</u>	Sample for: TPHmo 7-oxygenates
Calc. purge volume <u>7.81</u>	<u>9:15</u>	<u>&lt;1.00</u>	<u>0.31</u>	<u>55.4</u>	<u>5.81</u>	TPHg TPHd <u>8260</u>
	<u>9:35</u>	<u>~3.70</u>	<u>0.26</u>	<u>58.8</u>	<u>5.58</u>	<u>BTEX</u> <u>MTBE</u> 5-oxygenates
	<u>9:55</u>	<u>~7.81</u>	<u>0.24</u>	<u>60.6</u>	<u>5.48</u>	Purging Method: PVC bailer/Pump/ <u>Disposable Bailer</u>
COMMENTS: color, turbidity, recharge, sheen, odor <u>clear to light brown</u> <u>low to med turb</u> <u>fast recharge</u> <u>no sheen</u> <u>no odor</u>						Sampling Method: Dedicated / <u>Disposable bailer</u> Sample at: <u>10:00</u>



## PURGING DATA

SHEET 2 OF 2

Job No.: NC-18 Location: 7769 Myrtle Ave. Date: 1/4/05 Tech: M. Richard

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
MW-4		0	---	---	---	Sample for: TPHmo 7-oxygenates
Calc. purge	10:15	4.00	0.38	59.7	5.52	TPHg TPHd 8260
volume	10:35	~3.70	0.37	60	5.48	BTEX MTBE 5-oxygenates
7.40	10:55	~7.40	0.31	61.0	5.47	Purging Method:
						PVC bailer / Pump/Disposable Bailer
COMMENTS: color, turbidity, recharge, sheen, odor						Sampling Method:
clear to low to fast no light brown med turb recharge sheen odor						Dedicated / Disposable bailer
						Sample at: 11:00

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
MW-5		0	---	---	---	Sample for: TPHmo 7-oxygenates
Calc. purge	13:15	4.00	0.10	51.8	5.61	TPHg TPHd 8260
volume	13:35	~4.50	0.10	53.3	5.10	BTEX MTBE 5-oxygenates
9.11	13:55	~9.11	0.08	53.3	5.04	Purging Method:
						PVC bailer/Pump/Disposable Bailer
COMMENTS: color, turbidity, recharge, sheen, odor						Sampling Method:
clear to low to fast no light brown med turb recharge sheen odor						Dedicated / Disposable bailer
						Sample at: 14:00

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
		0	---	---	---	Sample for: TPHmo 7-oxygenates
Calc. purge						TPHg TPHd 8260
volume						BTEX MTBE 5-oxygenates
						Purging Method:
						PVC bailer/Pump/Disposable Bailer
COMMENTS: color, turbidity, recharge, sheen, odor						Sampling Method:
						Dedicated / Disposable bailer
						Sample at:





Report Number : 41830

Date : 1/12/2005

Andrew LoCicero  
Blue Rock Environmental, Inc.  
535 3rd Street, Suite 100  
Eureka, CA 95501

Subject : 6 Water Samples  
Project Name : Indianola Market  
Project Number : NC-18

Dear Mr. LoCicero,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff





Report Number : 41830

Date : 1/12/2005

Subject : 6 Water Samples  
Project Name : Indianola Market  
Project Number : NC-18

## Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for sample MW-2.

Approved By:

A handwritten signature in black ink, appearing to read "Joe Kiff".

Joe Kiff





Report Number : 41830

Date : 1/12/2005

Project Name : Indianola Market

Project Number : NC-18

Sample : MW-1

Matrix : Water

Lab Number : 41830-01

Sample Date :1/4/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Methyl-t-butyl ether (MTBE)	1.6	0.50	ug/L	EPA 8260B	1/6/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/6/2005
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	1/6/2005
4-Bromofluorobenzene (Surr)	118		% Recovery	EPA 8260B	1/6/2005

Sample : MW-2

Matrix : Water

Lab Number : 41830-02

Sample Date :1/4/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 1.5	1.5	ug/L	EPA 8260B	1/7/2005
Toluene	< 1.5	1.5	ug/L	EPA 8260B	1/7/2005
Ethylbenzene	< 1.5	1.5	ug/L	EPA 8260B	1/7/2005
Total Xylenes	< 1.5	1.5	ug/L	EPA 8260B	1/7/2005
Methyl-t-butyl ether (MTBE)	580	1.5	ug/L	EPA 8260B	1/7/2005
TPH as Gasoline	580	200	ug/L	EPA 8260B	1/7/2005
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	1/7/2005
4-Bromofluorobenzene (Surr)	97.0		% Recovery	EPA 8260B	1/7/2005
TPH as Diesel (Silica Gel)	< 80	80	ug/L	M EPA 8015	1/11/2005

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800





Report Number : 41830

Date : 1/12/2005

Project Name : Indianola Market

Project Number : NC-18

Sample : MW-3

Matrix : Water

Lab Number : 41830-03

Sample Date :1/4/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Methyl-t-butyl ether (MTBE)	9.0	0.50	ug/L	EPA 8260B	1/6/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/6/2005
Toluene - d8 (Surr)	99.0		% Recovery	EPA 8260B	1/6/2005
4-Bromofluorobenzene (Surr)	118		% Recovery	EPA 8260B	1/6/2005

Sample : MW-4

Matrix : Water

Lab Number : 41830-04

Sample Date :1/4/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Methyl-t-butyl ether (MTBE)	0.68	0.50	ug/L	EPA 8260B	1/6/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/6/2005
Toluene - d8 (Surr)	98.5		% Recovery	EPA 8260B	1/6/2005
4-Bromofluorobenzene (Surr)	115		% Recovery	EPA 8260B	1/6/2005

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800





Report Number : 41830

Date : 1/12/2005

Project Name : Indianola Market

Project Number : NC-18

Sample : MW-5

Matrix : Water

Lab Number : 41830-05

Sample Date :1/4/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Methyl-t-butyl ether (MTBE)	5.3	0.50	ug/L	EPA 8260B	1/6/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/6/2005
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	1/6/2005
4-Bromofluorobenzene (Surr)	114		% Recovery	EPA 8260B	1/6/2005
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	1/12/2005

Sample : DOM-1

Matrix : Water

Lab Number : 41830-06

Sample Date :1/4/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/7/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/7/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/7/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/7/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	1/7/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/7/2005
Toluene - d8 (Surr)	97.8		% Recovery	EPA 8260B	1/7/2005
4-Bromofluorobenzene (Surr)	94.7		% Recovery	EPA 8260B	1/7/2005

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Report Number : 41830

Date : 1/12/2005

**QC Report : Method Blank Data**Project Name : **Indianola Market**Project Number : **NC-18**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	1/7/2005
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	1/12/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/6/2005
Toluene - dB (Surr)	97.5		%	EPA 8260B	1/6/2005
4-Bromofluorobenzene (Surr)	95.7		%	EPA 8260B	1/6/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/5/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	1/5/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/5/2005
Toluene - dB (Surr)	98.9		%	EPA 8260B	1/5/2005
4-Bromofluorobenzene (Surr)	117		%	EPA 8260B	1/5/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	1/6/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/6/2005
Toluene - dB (Surr)	102		%	EPA 8260B	1/6/2005
4-Bromofluorobenzene (Surr)	96.9		%	EPA 8260B	1/6/2005

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:  Joel Kiff



## QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number : 41830

Date : 1/12/2005

Project Name : Indianola Market

Project Number : NC-18

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	983	969	ug/L	M EPA 8015	1/7/05	98.3	96.9	1.36	70-130	25
TPH as Diesel	Blank	<50	1000	1000	842	879	ug/L	M EPA 8015	1/12/05	84.2	87.9	4.32	70-130	25
Benzene	41846-01	<0.50	40.0	40.0	41.8	40.5	ug/L	EPA 8260B	1/6/05	104	101	3.04	70-130	25
Toluene	41846-01	<0.50	40.0	40.0	39.4	39.2	ug/L	EPA 8260B	1/6/05	98.6	97.9	0.718	70-130	25
Tert-Butanol	41846-01	18	200	200	228	227	ug/L	EPA 8260B	1/6/05	105	104	0.575	70-130	25
Methyl-t-Butyl Ether	41846-01	<0.50	40.0	40.0	34.4	33.4	ug/L	EPA 8260B	1/6/05	86.1	83.6	2.96	70-130	25
Benzene	41818-03	<0.50	40.0	40.0	37.9	37.2	ug/L	EPA 8260B	1/5/05	94.8	92.9	1.98	70-130	25
Toluene	41818-03	<0.50	40.0	40.0	37.9	37.4	ug/L	EPA 8260B	1/5/05	94.8	93.4	1.56	70-130	25
Tert-Butanol	41818-03	<5.0	200	200	194	192	ug/L	EPA 8260B	1/5/05	97.1	95.8	1.35	70-130	25
Methyl-t-Butyl Ether	41818-03	7.0	40.0	40.0	47.1	47.5	ug/L	EPA 8260B	1/5/05	100	101	0.991	70-130	25
Benzene	41831-03	<0.50	40.0	40.0	34.5	33.6	ug/L	EPA 8260B	1/6/05	86.3	84.1	2.62	70-130	25
Toluene	41831-03	<0.50	40.0	40.0	36.0	35.6	ug/L	EPA 8260B	1/6/05	89.9	89.0	1.01	70-130	25
Tert-Butanol	41831-03	<5.0	200	200	176	179	ug/L	EPA 8260B	1/6/05	88.2	89.5	1.42	70-130	25
Methyl-t-Butyl Ether	41831-03	<0.50	40.0	40.0	28.7	28.6	ug/L	EPA 8260B	1/6/05	71.8	71.6	0.301	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By: Joel Kiff



QC Report : Laboratory Control Sample (LCS)

Report Number : 41830

Date : 1/12/2005

Project Name : **Indianola Market**

Project Number : **NC-18**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	1/6/05	98.2	70-130
Toluene	40.0	ug/L	EPA 8260B	1/6/05	97.1	70-130
Tert-Butanol	200	ug/L	EPA 8260B	1/6/05	106	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	1/6/05	82.5	70-130
Benzene	40.0	ug/L	EPA 8260B	1/5/05	94.7	70-130
Toluene	40.0	ug/L	EPA 8260B	1/5/05	95.2	70-130
Tert-Butanol	200	ug/L	EPA 8260B	1/5/05	96.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	1/5/05	100	70-130
Benzene	40.0	ug/L	EPA 8260B	1/6/05	95.2	70-130
Toluene	40.0	ug/L	EPA 8260B	1/6/05	103	70-130
Tert-Butanol	200	ug/L	EPA 8260B	1/6/05	101	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	1/6/05	85.4	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff







2795 2nd Street, Suite 300  
Davis, CA 95616  
Lab: 530.297.4800  
Fax: 530.297.4808

Lab No. 41830

Page 1 of 1

Project Contact (Hardcopy or PDF To):

Andrew Locicero

California EDF Report? ☒ Yes ☐ No

Company/Address: Blue Rock Env Inc

535 Third St Ste 100 Eureka

Phone No.:

(707) 441-1934

FAX No.:

(707) 441-1949

Recommended but not mandatory to complete this section:

Sampling Company Log Code: . . . . .

Global ID:

T-0-6-0-2-3-0-0-4-8-9

Project Number:

NC-18

P.O. No:

-

EDF Deliverable To (Email Address):

melissa@bluerockenv.com

Project Name:

Indianola Market

Sampler Signature:

Melissa Richard

Project Address:

7769 Myrtle Ave

Eureka CA

Sample Designation

Sampling

Container

Preservative

Matrix

Date

Time

40 ml VOA

SLEEVE

HCl

HNO<sub>3</sub>

ICE

NONE

WATER

SOIL

BTEX (8021B)

BTEX/TPH Gas/MTBE (8021B/M8015)

TPH as Diesel (M8015) Silica-gel

TPH as Motor Oil (M8015)

TPH Gas/BTEX/MTBE (8260B)

5 Oxygenates/TPH Gas/BTEX (8260B)

7 Oxygenates/TPH Gas/BTEX (8260B)

5 Oxygenates (8260B)

7 Oxygenates (8260B)

Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)

EPA 8260B (Full List)

Volatile Halocarbons (EPA 8260B)

Lead (7421/239.2) TOTAL (X) W.E.T. (X)

TAT

12 hr/24 hr/48 hr/72 hr/1 wk

For Lab Use Only

Relinquished by:

Melissa Richard

Date  
1/4/05

Time  
-

Received by:

Fed Ex

Relinquished by:

Date

Time

Received by:

Relinquished by:

Date

Time

Received by Laboratory:

Kiff Analytical

Remarks: The samples arrived on wet ice via Fed ex @ 0900. The temp was 2.70C using IR-1. BAG 010505 1015

Silica-gel cleanup for M8015

Bill to:

Foster City